

What Is Claimed Is:

1. A driver device for a voltage-controlled oscillator (10), comprising an unstable voltage source (14), a voltage regulator (22), a driver (18) for generating a control voltage (U2) for the oscillator (10), and a feedback loop (20) which controls the driver (18) as a function of the output signal (RF) of the oscillator (10), wherein the voltage regulator (22) supplies the feedback loop (20) with operating voltage, while the driver (18) is powered by the unregulated voltage (Ub) of voltage source (14), and the feedback loop (20) is designed to compensate for voltage fluctuations of the voltage source (14) with the aid of the driver (18).
2. The driver device as recited in Claim 1, wherein the feedback loop (20) is a phase-locked loop.
3. The driver device as recited in Claim 2, wherein the feedback loop (20) receives an intermediate-frequency signal (IF), which is formed by mixing the output signal (RF) of the oscillator (10) with a reference signal (B) having a fixed frequency, and the feedback loop compares the phase of the intermediate-frequency signal (IF) to the phase of a reference signal (Ref) and controls the driver (18) on the basis of the comparison result in such a manner, that the frequency of the oscillator (10) follows the frequency of the reference signal (Ref).
4. The driver device as recited in one of the preceding claims, wherein the control voltage (U2) for the oscillator (10) is greater than the operating voltage for the feedback loop (20) supplied by the voltage regulator (22).
5. The driver device as recited in one of the preceding claims, wherein a filter circuit (16; 16') is inserted between the voltage source (14) and the driver (18).

6. The driver device as recited in Claim 5, wherein the filter circuit (16') has a voltage-limiting function.

7. The driver device as recited in Claim 5 or 6, wherein at least the filter circuit (16') and the driver (18) take the form of separate components.

8. A radar system having a microwave oscillator (10) for a motor vehicle, characterized by a driver device (12) as recited in one of the preceding claims, which has the vehicle battery as a voltage source (14).